# Communicable Disease

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### Memoriam - Sylvie Ratelle, MD, MPH Trends in STDs in Massachusetts

Dr. Sylvie Ratelle, the Medical Director of the Massachusetts Division of STD Prevention, and Director, New England STD/HIV Prevention Training Center, passed away on November 18, 2006, after a long and courageous struggle against breast cancer.

Sylvie was with the Division of STD Prevention for many years and was the founder and driving force behind the STD/HIV Prevention Training Center of New England. Over the years of its operation, under Sylvie's leadership, the Prevention Training Center trained thousands of clinicians and laboratorians in New England and around the country. Sylvie was also author of publications on preventive medicine and public health, as well as STDs.

Prior to joining the Department of Public Health, Sylvie provided community-based STD, HIV/AIDS and women's health services in Montreal and on the North Shore of Massachusetts. She received her M.D. from the Université de Montreal in 1979 and did an internship at the Hotel-Dieu de Montreal. While working at MDPH, she received an M.P.H. from Harvard School of Public Health in 1994 and completed a preventive medicine residency at University of Massachusetts Medical School in 1996.

Sylvie's tireless commitment to evidence-based and sensible public health practice provided a most valuable resource to the department, and the healthcare and public health community across the state and nation. A living legacy resides in the Prevention Training Center and its durable educational resources. The STD/HIV Prevention Training Center of New England will be named after Sylvie Ratelle to recognize that legacy.



Sexually-transmitted diseases (STD) continue to represent a major public health problem in Massachusetts. In general, chlamydia and gonorrhea disproportionately affect adolescents and young adults, especially in communities of color. Infectious syphilis predominantly impacts men who have sex with men.

Below is a brief description of trends in incidence of chlamydia, gonorrhea and infectious syphilis.

Reported *Chlamydia trachomatis* infections in Massachusetts increased 5.4% from 2005 to 2006, from 14,520 to 15,308. In 2006, the majority (69%) of reported cases were in people aged 15-24 years old with a female to male ratio of approximately 3:1. The incidence of chlamydia infection was 18 times higher among blacks and 13 times higher among Hispanics.

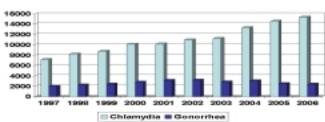
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From 2005 to 2006, there was an 8.6% decrease in reported infections due to *Neisseria gonorrhoeae* from 2,549 to 2,427 cases. In 2006, 48% of the cases were in people aged 15-24 years old, with a male to female ratio of 1:1. When compared to whites, the incidence of gonorrhea was 26 times higher among blacks and 10 times higher among Hispanics.

From 2005 to 2006, incidence of infectious syphilis (primary, secondary and early latent) in Massachusetts dropped by 7.8% from 232 to 214. In 2006, the majority (69%) of these cases were in men who have sex with men. There was equal representation of infectious syphilis in people aged 25-39 and 40-54 years old; each group composed 43% of the cases.

Detailed data on STDs and HIV/AIDS in Massachusetts can be found at http://www.mass.gov/dph/cdc/aids/2005\_surveillance.pdf

#### Trends in Chlamydia and Gonorrhea Massachusetts, 1997-2006



## **Epidemiology**

#### **Brucella in the Laboratory**

Incidents of laboratory exposure to *Brucella* organisms have occurred in Massachusetts hospitals. In each situation, the laboratory was not appraised of the possibility of brucellosis as a diagnosis. A number of laboratory workers were exposed and at least one developed infection.

Brucellosis is a systemic, bacterial disease of acute or insidious onset, caused by the species *Brucella*, including *abortus*, *melitensis*, *suis* and *canis*. Although many countries have eradicated *Brucella abortus* from cattle, in some areas *Brucella melitensis* has emerged as a cause of infection, particularly in sheep and goats. Approximately 100-200 cases are reported in the United States each year, typically occurring in immigrants or travelers returning from areas with endemic infection. Humans contract the disease by direct contact with infected animals or their carcasses or secretions, by ingesting unpasteurized milk or milk products, or through inhalation of contaminated aerosols.

Although the incidence of brucellosis has steadily declined in most industrialized countries during the last 50 years, brucellosis remains among the most commonly recognized causes of laboratory-transmitted infection. Over 400 cases and five deaths have been reported in the literature. Brucellosis has occurred following dropped culture plates or ruptured centrifuge tubes. It has also been reported following routine laboratory work, outside of biological safety cabinets.

The Centers for Disease Control and Prevention (CDC) recommends that *Brucella* isolates be manipulated in a class II or higher biological safety cabinet. Since most work in the clinical laboratory is not done in such an environment, it is extremely important that clinical laboratories be notified when a diagnosis of brucellosis is suspected. Furthermore, clinicians should consider brucellosis in laboratory workers with unexplained signs and symptoms consistent with brucellosis.

While no controlled studies have been performed to assess the value of administering post-exposure prophylaxis to persons exposed to *Brucella* spp. in the laboratory, anecdotal evidence suggests that such therapy may reduce the risk of developing clinical disease. Post-exposure prophylaxis should be instituted as soon as inadvertent, high-risk exposures are identified, and should consist of oral doxycycline (100 mg twice daily) and rifampin (600 mg once daily) used in combination for 3-6 weeks. In addition serologic follow-up of exposed workers should be conducted at regular intervals.

#### References:

Heymann, D., ed. *Control of Communicable Diseases Manual,* 18<sup>th</sup> Edition. Washington, DC, American Public Helalth Association, 2004.

American Academy of Pediatrics. In: Pickering L.K., ed. *Red Book: Report on the Committee on Infectious Diseases, 27<sup>th</sup> Edition.* Elk Grove Village, IL, Academy of Pediatrics; 2006.

Yagupsky P, Baron EJ. Laboratory Exposures to Brucellae and Implications for Bioterrorism. Emerg Inf Dis. 2005;8:1180-1185.

# Recurring Invasive Meningococcal Disease

A recent review of cases of invasive meningococcal disease (IMD) reported over the last ten years in Massachusetts residents has identified three instances of recurrent infection. At the time of first diagnosis, case ages ranged from 19 to 23 years. Time intervals from their first occurrence to their second occurrence for the three cases were 18 months, 3.5 years, and nearly 5 years.

It is well known that persons with terminal complement component (C5-C9) deficiency, or with C3 or properdin deficiencies, exhibit a striking susceptibility to IMD, with population-based studies suggesting the risk to be increased from 700- to several thousand-fold, depending on the deficiency. Interestingly, those with C5-C9 deficiencies tend to have a more favorable clinical outcome as long as appropriate therapy is instituted.

In addition to outcome, IMD in the complement deficient patient can also exhibit several unique features regarding the age at first onset, the serogroup isolated and whether the infection is a recurrence, and these features can assist the physician in identifying patients with these deficiencies. The median age at onset in persons with normal complement components is three years, with 56% of infections occurring before five years of age; in contrast the median age of first infection in complement-deficient patients is 17 years, with only 10% of infections occurring before five years of age. Meningococcal disease in complement-deficient patients is caused by uncommon serogroups more often than in persons without complement deficiencies. The recurrence rate in complement deficient individuals is believed to be as high as 150 times greater than in the general population.

Evaluation of the patient's complement system should strongly be considered when there is a personal or family history of recurrent systemic infection caused by encapsulated bacteria, especially *Neisseria meningitidis*. It should also be considered when IMD occurs in persons older than 10 years of age.

The importance of identifying these individuals cannot be overstated. A major aspect of appropriate management is the prevention of infection, which is best achieved through vaccination. All complement deficient persons should be **continued on page five** 

### **Immunization**

### **Shingles Vaccine Information**

On May 25, 2006, the Federal Food and Drug Administration (FDA) licensed a shingles (herpes zoster) vaccine (Zostavax®, Merck), for use in people 60 years of age and older.

### Advisory Committee on Immunization Practices (ACIP) Recommendations

On October 25, 2006, the ACIP voted on recommendations for the use of a *single* dose of shingles vaccine. These provisional recommendations are for vaccination for all persons 60 years of age and older, including those who have previously had shingles, to prevent shingles and post-herpetic neuralgia. Persons with chronic medical conditions may be vaccinated unless a contraindication or precaution exists.

The ACIP provisional recommendations can be found at the Centers for Disease Control and Prevention (CDC) website http://www.cdc.gov/nip/ACIP/default.htm, but are not considered final until they are published in CDC's *Morbidity and Mortality Weekly Report (MMWR)*. When the final recommendations are published, they will be accessible on the CDC website.

#### **Shingles**

Shingles is caused by reactivation of the varicella zoster virus, which lies dormant in the nerve cells of a person who has had chickenpox (or received varicella vaccine). Years or decades later, the virus may re-activate and cause shingles. The risk of shingles is greatest in the elderly and those who are immunocompromised. Risk increases with age.

#### **Shingles Vaccine**

Shingles vaccine contains the same virus strain (Oka/Merck) as varicella vaccine, but is 14 times more potent. The vaccine is given as a single, 0.65 mL dose, administered subcutaneously.

In clinical trials, those who received vaccine had about 50% fewer cases of shingles, less severe disease and 66% less postherpetic neuralgia than those who received placebo. For more information on the efficacy and safety of shingles vaccine, including contraindications and precautions to the use of shingles vaccine, please see the Zostavax® package insert: http://www.merck.com/product/usa/pi\_circulars/z/zostavax/zostavax pi.pdf.

#### **Storage and Handling of Shingles Vaccine**

Shingles vaccine, like varicella vaccine, has very specific storage and handling requirements:

 Shingles vaccine must be kept frozen (<-15° C or <+5° F) at all times. Diluent should be stored separately at room temperature (20-25°C, 68-77°F) or in the refrigerator (2-8°C, 36-46°F).

- A frost-free freezer with a separate, insulated door which maintains a freezing temperature (<-15°C or <+5°F) should be used to store shingles vaccine until it is reconstituted.
- A dorm style refrigerator with a freezer compartment is **not** acceptable for vaccine storage.
- Reconstitute shingles vaccine immediately after it is removed from the freezer.
- Shingles vaccine must be used within 30 minutes of reconstitution or discarded.
- Reconstituted vaccine should not be frozen.

It is important to ensure that you have the appropriate equipment to store vaccines and medications which require refrigeration or freezing. In addition to shingles vaccine, vaccines for adults, including human papillomavirus (HPV) and tetanus, diphtheria and acellular pertussis (Tdap) vaccines also have specific storage requirements, but at refrigerator temperature (2-8°C or 36-46°F). While stand alone refrigerators and freezers are best, it is acceptable to have a household style refrigerator/freezer unit as long as the freezer has a separate, insulated door and maintains a temperature of <-15°C or <+5°F. Dorm style refrigerators with a freezer compartment are **not** acceptable for storage of any vaccines. It is worth investing in a reliable refrigerator and freezer to ensure that your patients receive vaccine which hasn't been compromised by inadequate storage conditions, and to guard against excess costs from loss of vaccines due to inappropriate storage.

#### **Vaccine Information Statements**

An interim vaccine information statement (VIS) for shingles vaccine was issued on September 11, 2006 and is available at: http://www.immunize.org/vis. A final VIS will be published with a new date and will be available at the above website.

#### **Reporting of Adverse Events after Vaccination**

It is important for all clinically significant adverse events to be reported to the Vaccine Adverse Event Reporting System (VAERS), even if a causal relationship to vaccination is uncertain. VAERS reporting forms and information are available electronically at: http://vaers.hhs.gov or by calling (800) 822-7967. Providers are encouraged to report electronically at: https://secure.vaers.org/VaersDataEntryintro.htm

#### **Vaccine Availability and Ordering**

MDPH is not supplying shingles vaccine. Physicians will have to purchase shingles vaccine for their patients. Zostavax® can be ordered from a vaccine distributor, or directly from the vaccine manufacturer, Merck (http://www.merckvaccines.com or 1-800-637-2590). The current procedural terminology (CPT) code for shingles vaccine is 90736; this code should be used for reimbursement. Shingles vaccine will be reimbursed for *continued on page nine* 



# The Role of DIS in STD Prevention and Control

In order to understand the role of Disease Intervention Specialists (DIS) in the control and prevention of sexually transmitted diseases (STDs) it is essential to know what happens when someone in Massachusetts tests positive for a reportable STD. Positive test results for gonorrhea, chlamydia infection and syphilis reported to the Massachusetts Department of Public Health (MDPH) by both the laboratory that performs the test and by the health care provider who makes the diagnosis. After careful review, positive cases are distributed to DIS, who then initiate the process of working with and through medical care providers to ensure that infected clients and their sexual partners are treated adequetly and prevent additional infections from occurring.

Each DIS must call the medical provider who diagnosed the client to verify both treatment and contact information for the client. Oftentimes, nurses provide additional details that can make the work a little easier. In addition to confirming addresses, phone numbers, demographic information and medical treatments, nurses can also provide information related to previous negative tests, symptoms and alternate phone numbers. DIS are authorized by law to access medical records in order to prevent or control disease, injury and disability. All information gathered about clients, whether from medical records or from direct conversation, is kept in the strictest confidence. Confidentiality is the cornerstone of the work and a DIS' ability to keep secret all information related to infected clients is absolutely essential.

Once the DIS has contacted the medical provider, the provider helps the DIS to arrange to meet with the client, one-on-one, to explain the infection, provide risk reduction information, and offer STD testing and treatment to sexual partners who may potentially be infected. All of these bacterial STDs can be treated with antibiotics but if left untreated, can cause very serious consequences that may threaten an individual's reproductive health and well-being. Additionally, untreated STDs facilitate transmission of HIV infection. DIS check treatment details. By preventing reinfection from untreated sexual partners and by teaching infected individuals how to reduce their risk of future infections, chains of infection can be broken.

A sometimes controversial and often misunderstood part of DIS work involves reaching out to sex partners, who could have infected or who could have been infected by the client. When DIS meet with infected clients, they consistently offer referrals for testing and, if necessary, treatment for all sexual partners. Most frequently, this involves the DIS contacting sexual partners, letting them know that they may have been exposed to an STD (stating the specific STD) and helping them determine where and when they want to be tested. Never, under any circumstances, is the original client identified or acknowledged

to the contact. Information shared with the DIS can be embarrassing, upsetting and frightening. However, many of the sexual partners contacted are appreciative and grateful for the services. In fact, many clients and their sexual partners contact DIS months after the initial services were provided, with sexual health-related questions or concerns.

#### **STD Clinic Services in Massachusetts**

The Massachusetts Department of Public Health (MDPH) provides support for seven categorical STD clinics in Massachusetts. The clinics are located in Boston (2), Brockton, Haverhill, Pittsfield, Springfield, and Worcester. They are colocated at a variety of provider sites, including hospitals, local community health centers and a Planned Parenthood facility.

In 2006, the STD clinics provided services to 15, 112 patients. Approximately 70% of the patients were male and 30% female. A total of 36 infectious syphilis cases, 200 gonorrhea cases and 781 chlamydia cases were diagnosed at these STD clinics in 2006.

The STD clinics provide comprehensive clinical and diagnostic STD services. The following diagnostic tests are provided for all patients:

STD	Tests Performed
Chlamydia	<ul> <li>Urethral swab or urine</li> <li>Cervical swab</li> <li>Rectal swab (as indicated)</li> </ul>
Gonorrhea	<ul> <li>Urethral culture</li> <li>Cervical culture</li> <li>Rectal, pharyngeal culture (as indicated by history)</li> <li>Gram stain of urethral fluid (all males)</li> </ul>
Syphilis	<ul> <li>Serology by RPR with complimentary TPPA test</li> </ul>

HIV counseling and confidential testing is offered to all patients. All patients are required to return for their HIV test results in person.

In addition to STD care, all STD clinics provide referrals as necessary, for such services as primary care, family planning and substance abuse. The referral may be in-house or to an outside facility.

Patients are seen regardless of their ability to pay. All of the STD clinics operate on a walk-in basis and vary as to hours of operation. A complete STD schedule can be found on the MDPH website at: http://www.mass.gov/dph/cdc/std/services/clinicsched. For more information about STD clinics in Massachusetts, contact Bill Dumas at Bill.Dumas@state.ma.us.

# Refugee and Immigrant Health

# Refugee Resettlement in Western Massachusetts

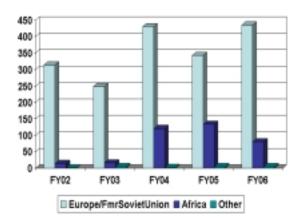
Western Massachusetts has been home to refugees for many years. In the 1980's, most were from Southeast Asia. From the late 1980's and until today, refugees from the countries of the former Soviet Union have been the largest group to arrive, resettling in Westfield, West Springfield, Chicopee, Greenfield and other area communities. Over the five year period covered by fiscal years 2001 through 2006, former Soviet Union refugees were from fifteen countries, with the largest numbers from Moldova, Ukraine, Russia, Uzbekistan and Belarus. Most recently, resettlement of African refugees – Somali Bantu, Liberians, Sudanese, Congolese, Ethiopians and Sierra Leoneans – has led to increased diversity in the refugee population.

In 2001, recognizing the local capacity for refugee resettlement and integration, the Office for Refugees and Immigrants encouraged those organizations working with refugees in Western Massachusetts to form closer working relationships and to explore expanding resettlement opportunities to new populations. This initiative was effective in forging partnerships and a shared vision for future resettlement and, as the Greater Springfield Community Partnership for Refugee Resettlement, was successful in securing a "Preferred Communities" grant from the federal Office of Refugee Resettlement. Led by Jewish Family Service of Western Massachusetts, the grant allowed providers and local government agencies to plan and prepare for a new refugee population - Somali Bantu - developing housing resources and orientation, education, and employment services tailored to the needs and experiences of Somali Bantu. In 2003, Western Massachusetts received the first Somali Bantu refugees. In total, approximately 200 Somalis resettled in Springfield.

Known today as the Western Massachusetts Refugee and Immigrant Consortium, the partnership provides a mechanism for providers in the region to collaborate on a range of refugee and immigrant issues. Participants include representatives from refugee resettlement agencies (Jewish Family Service of Western Massachusetts, Lutheran Community Services), refugee mutual assistance associations (Vietnamese American Civic Association, Boat People SOS, Russian Community Association of Massachusetts), community providers (Catholic Charities of Springfield, YMCA, Child and Family Services), city agencies (Springfield Mayor's Office, Springfield School Department), health care providers (Mercy Hospital, Caring Health Center), and state agencies (Office for Refugees and Immigrants, Department of Mental Health, Department of Public Health). The Consortium meets monthly to share and address the different challenges the participants are facing in their work and try to generate strategies that will help to improve the situation.

Caring Health Center, formerly known as Springfield Southwest Community Health Center, is the Refugee Health Assessment Program provider for the region. Over the last five years, the health center completed health assessments for 99% of the 1,920 newly arrived refugees referred for services. This high rate of refugee engagement with care reflects the health center's commitment to assuring language and culture access as well as the efforts of community partners involved with resettlement. Many refugees have continued to receive primary care through Caring Health Center, becoming part of the increasingly multicultural patient mix at the health center.

### Resettlement in Western MA: FY02-06



### Meningococcal Disease

#### continued from page two

vaccinated with the tetravalent meningococcal vaccine. Furthermore, there are some experts who believe that the polyvalent pneumococcal vaccine and the conjugate *Haemophilus influenzae* vaccines should also be given to any individual with complement component deficiency.

#### References:

Tunkel, Allan R., *Bacterial Meningitis*, Philadelphia: Lippincott Williamson & Wilkins, 2001

Mandel, Douglas and Bennett, *Principles and Practice of Infectious Diseases*, Sixth Ed., Philadelphia: Elsevier, 2005.



### Massachusetts and New England Tuberculosis Prevention and Control Programs Expand Collaborative Efforts

The six New England tuberculosis (TB) control programs have recently created a mechanism to communicate, coordinate, and collaborate on specific issues related to TB prevention and control. New England is considered to have moderate (Massachusetts) to low (Vermont) TB rates. As a consequence of increasing immigration from a wide range of countries where TB rates are high, the New England states are greatly impacted by a changing epidemiology of TB. Another challenge for the New England TB programs is maintaining the relatively low TB rates among traditional populations that are vulnerable to TB, especially the homeless and incarcerated, to prevent outbreaks and to hasten the decline of TB in these groups. These challenges come at a time when funding to local and state TB programs is declining. This article will detail examples of this new partnership among public health departments.

The first step toward expanded regional collaboration was to develop a consensus plan to focus on-going discussion and problem-solving. The New England region TB plan provides a framework for promoting regionalization as a means to improve and enhance TB prevention and control as part of the vision for TB elimination. The framework sets the goals and objectives for effective collaboration in the region and identifies five key regional TB strategies:

- Engage in on-going dialogue to promote regional planning and policy development
- Increase education and training geared to identified needs
- Actively use data from molecular genotyping of Mycobacterium tuberculosis strains
- Use program evaluation to improve health outcomes
- Intensify coordination of cross-jurisdictional case reviews and contact investigations

The CDC's Division of Tuberculosis Elimination (DTBE) and state and local partners are supporting this effort to share experiences and resources. Since 2005, Dr. Mark Lobato, a CDC medical officer, has been working with the New England TB programs to develop a regional approach to capacity-building through supporting existing programs and implementing new initiatives. The participating state TB programs have expanded their communication to encompass a more generalized and systematic collaboration on priority areas.

Kathy Hursen, director of education and training for the Massachusetts Division of TB Prevention and Control, and Erin Howe, health educator for the Northeast Regional Training and Medical Consultation Consortium, have led the effort to improve and expand TB education in the region. Several sources indicate

that health providers have ongoing educational needs, including:
1) a regional education needs assessment, 2) studies documenting non-adherence to national TB standards and guidelines by private providers, and 3) a CDC study documenting that 40% of private providers do not use a recommended treatment regimen.

Examples of regional collaboration

#### **Eliminating TB Case by Case**

One success story has been a series of TB case presentations entitled "Eliminating TB Case by Case". Organized by a coordinating group from the New England TB Programs, the Regional Training and Medical Consultation Centers (RTMCCs), and DTBE created the course. Contributors to the effort included Kathy Hursen (MA), moderator for the series, Judy Proctor (NH), Erin Howe (Northeast RTMCC), and Mark Lobato (CDC).

The web-based case series presents patients that illustrate public health principles and practices. The goal of the TB case series is to offer a forum for discussing the public health implications of infectious TB, describing the clinical management of TB, increasing awareness of national recommendations for TB diagnosis and treatment, and discussing options for ongoing patient care. To date, each of six presentations has reached between 60 to 80 nurses, physicians, health educators and others. The inaugural presentation featured Robert Horsburgh, MD, from the Boston University School of Public Health and the Boston Medical Center. Dr. Horsburgh, a local and national expert in TB and HIV treatment, skillfully drew participants into an active dialogue about the case thereby laying a groundwork for future presentations. An upcoming presentation is planned with Dr. Marie Turner, medical director of the TB Treatment Unit at the Lemuel Shattuck Hospital in Boston.

#### NewEnglandTB.org

Another success had been the development of a regional TB website "NewEnglandTB.org". The intent of the website is to provide a tool for building program capacity by sharing developed resources and materials, communicating experiences and successful strategies, and giving providers access to education and training resources and patient education materials. Developed by a regional team, including Marilyn DelValle (MA) and Lisa Roy (NH), the TB programs are in the process of learning how to improve and promote the use of the website as a tool for public health nurses and TB providers.

#### **Molecular TB Genotyping**

Finally, the TB programs are at the beginning stages of sharing molecular TB genotyping data. The New England states are using advanced technological information to define the specific TB strains circulating in their states. The common experience of investigating infectious TB patients has shown that state programs often communicate and collaborate with their *continued on page nine* 

# **HIV/AIDS Surveillance**

# **HIV Reporting in Massachusetts for** To obtain case report forms and other materials contact: **Health Care Providers**

As of January 1, 2007, HIV infection is reportable by name to the HIV/AIDS Surveillance Program of the Massachusetts Department of Public Health (MDPH). AIDS cases have been reported by name to MDPH since 1983. Although the previous name-based code system was performing well, the U.S. Centers for Disease Control and Prevention (CDC) now requires name reporting to meet their national standard. Prospectively, federal funding for Massachusetts will be based on reported cases of AIDS and HIV infection that include names. However, no names or other personal identifiers are reported to the federal government.

All patients diagnosed with HIV infection, who are receiving medical care, should be reported by name. If individuals currently in care have been previously reported using the name-based code, the Department expects these individuals to be re-reported by name prior to December 31, 2007.

This reporting change should also serve as a reminder that current HIV testing and medical care consent forms should be reviewed to be certain they are accurate about reporting by name to MDPH. A new consent to care form may need to be signed if the previous consent to care stated that the patient's name would not be reported to DPH.

State regulations (105 CMR 300) identify both AIDS and HIV as reportable diseases and mandate that physicians and other health care providers report HIV and AIDS cases which they diagnose. Because persons with HIV infection often receive treatment from several providers at the same time, the primary medical care provider and/or the facility where care is provided are considered the principal source of HIV case reports. Facilities with large HIV case loads should develop a coordinated reporting plan and designate an individual responsible for reporting. Patients who are not Massachusetts residents are not reportable. Likewise, providers and facilities located outside Massachusetts are not subject to the reporting regulation.

According to revised state reporting regulations, at no time can the names of people with HIV infection or AIDS be shared with the federal government, any state or local department or with any other program in the state health department. All public reports will have no identifying or potentially identifying information.

The Department's priority is for all individuals diagnosed with HIV infection and AIDS to have access to and be able to maintain quality clinical care. Sufficient effort should be taken to explain the new reporting system to persons newly diagnosed with HIV infection and all persons alive and in care for HIV infection in a manner that enlists patient trust in the reporting system and preserves continuity of patient care.

The Massachusetts HIV/AIDS Surveillance Program Massachusetts Department of Public Health (617) 983-6560

Additional information is available at www.mass.gov/dph/ aids



### **Integration of STD and Hepatitis** Services at HIV Counseling and **Testing Sites**

The Division of STD Prevention, the Hepatitis C Program, and the HIV/AIDS Bureau, in cooperation with the State Laboratory Institute's STD and Viral Hepatitis laboratories, have initiated STD screening at the eleven Integrated Counseling, Testing, and Referral sites state-wide (visit: www.mass.gov/Eeohhs2/ docs/dph/aids/resources guide.doc). These sites already provide HIV and hepatitis C counseling and testing and vaccination against hepatitis A and B.

The goal is to make STD testing available to clients who present for HIV and/or hepatitis C counseling and testing. Counselors at the integrated sites will begin offering STD testing in March 2007 to all clients who are at-risk for HIV infection. Chlamydia, gonorrhea and syphilis screening tests will be offered. Clients will be asked to provide urine and blood samples for these additional tests.

After six months, client utilization and STD positivity rates will be assessed to determine the cost efficacy of providing these additional services at the integrated sites. For more information about these services contact Sheila Nelson (ph: 617-983-6961) at the Division of STD Prevention, Dan Church (ph: 617-983-6830) at the Division of Epidemiology and Immunization, or Bernadette Green (ph: 617-624-5305) at the HIV/AIDS Bureau.

# You Be The Epi

A school nurse calls the Massachusetts Department of Public Health (MDPH) Division of Epidemiology and Immunization. A 6<sup>th</sup> grader is the 7<sup>th</sup> confirmed case of pertussis at the middle school and the school is looking for guidance regarding control measures. What should they do?

The nurse states that the case began coughing 2 weeks ago and has been appropriately treated, and it has been less than 3 weeks since he was in school while infectious, and therefore feels further control measures may be needed. She has also determined that there are 25 children in the case's class, as well as his teacher and the teacher's aide. Further investigation reveals the ill child walks to school with his sister and good friend, eats lunch with the same 25 classmates and is not currently involved in any extracurricular activities. However, he does spend every weekend and afternoon after school with the same good friend.

### New Recommendations to Prevent the Spread of Pertussis:

Recently the Centers for Disease Control and Prevention (CDC) have changed recommendations for the control of pertussis. New guidelines include the use of Tdap (tetanus, diptheria and Acellular pertussis vaccine for adolescents and adults) in outbreak settings and a reduction in the number of people considered close contacts who require antibiotic prophylaxis.

#### **Antibiotic Prophylaxis:**

The entire class is no longer considered to represent close contacts (however, in a daycare setting, the entire group would be considered exposed and close contacts because of the increased possibility of transmission due to lack of cough etiquette and hand hygiene). Therefore, prophylaxis is not recommended for the entire class. The focus of disease prevention is now centered on those contacts that are high risk (such as infants, immunocompromised individuals, those with chronic lung disease, etc) or those who could transmit disease to high risk individuals. A letter provided by MDPH, is sent to the entire class, informing them that there is a case of pertussis, what the signs and symptoms of pertussis are, and what to do if signs and symptoms develop. In addition, the letter will advise that if any of these children are contacts to high risk individuals (such as a new baby at home); they should consult their provider regarding prophylaxis to protect this high risk individual. The school nurse will work with the epidemiologist to determine the appropriate letter(s) to be used in this situation.

Since it has been less than 3 weeks since the case's last infectious day, there are recommendations for close contacts to receive antibiotic prophylaxis. This includes all household members as well as the good friend who he sees daily throughout the week. These close contacts may continue to attend school or work, if they are taking the appropriate antibiotics and remain asymptomatic. If they develop cough

before they finish 5 days of antibiotics, they must be excluded and tested for pertussis. Macrolides (erythromycin, azithromycin, clarithromycin) are now the drugs of choice and they are recommended for use in younger age groups. Bactrim is no longer routinely recommended. The 5-day "Z-pac" of azithromycin formulation is now acceptable for treatment and prophylaxis. There may be one or two individuals in the classroom that receive antibiotics due to high risk situations at home, but there is now no requirement for exclusion of these individuals, or prophylaxis of the rest of the class.

#### **Tdap Vaccine:**

Because this is an outbreak situation, the letter provided by MDPH will also advise that the parents of adolescents between the ages of 10 and 18 years contact their providers to receive a dose of Tdap, if they have not yet received a dose. This recommendation may be made just to the class, or may be sent to a larger group, depending where cases have occurred. While this booster dose does not replace the recommendation for antibiotic prophylaxis for close contacts, it is used to cut down on the future spread of the disease and hopefully result in less symptomatic children. State-supplied vaccine is available, in limited quantities, for this purpose and may be used for these adolescents; however, adults will need to contact their providers to receive privately purchased Tdap vaccine.

MDPH is working with local boards of health and schools to implement these new control measures. Updated guidelines and letters are in the revised version of the MDPH publication, Guide to Surveillance and Reporting, which can be found at: http://www.mass.gov/dph/cdc/epii/reportable/reportable.htm.

CDC. Recommended Antimicrobial Agents for Treatment and Postexposure Prophylaxis of Pertussis. MMWR 2005; 54 (No. RR14).

CDC. Preventing Tetanus, Diphtheria, and Pertussis among Adolescents: Use of Tetanus Toxoid, Reduce Diphtheria Toxoid and Acellular Pertussis Vaccines. MMWR. 2006; 55 (No RR-3).

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#### John M. Auerbach, Commissioner of Public Health

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#### **TB Nurse Highlight**

In some parts of the world nurses who see patients in their homes are called "visiting sister", a term that aptly describes this newletter's spotlighted public health nurse, Pam Phillips, RN, of Leominster. Her good will and dedication to those in her care are well known. Pam's roots in central Massachusetts are deep; she was born and raised in Fitchburg, in a house built by her grandfather and now occupied by her oldest daughter.

As a young girl Pam was unsure of which career path to follow, as options then were limited to teaching, nursing and secretarial. During her senior year in high school, she volunteered at a local rest home where she was exposed to nursing. Pam found that she enjoyed taking care of people: patient comfort was her comfort. She enrolled at Burbank Hospital School of Nursing and earned her qualifying diploma for LPN, followed soon after by a qualifying diploma for RN.

For twenty-four years, Pam worked in various clinic settings, gaining knowledge and experience that served her well when, in 1992, she accepted a position as Public Health Nurse for the City of Leominster. Pam had always wanted to work in public health and states she has loved the diversity of her job. She and her colleague, Christine DeLisle, oversee communicable disease control, provide screening and consultation for parochial schools, staff flu clinics and provide immunizations, in addition to caring for tuberculosis suspects, cases and contacts. Her TB work is often the most demanding and time consuming. However, because Leominster, Fitchburg, and the surrounding towns have had a history of cooperation and trust with the Chest Clinic at Health Alliance, the TB program has succeeded as a team effort and communication regarding patient progress has been direct and timely. Pam provides directly observed therapy three to five days per week, and will see patients anytime from seven AM to seven PM. In addition to offering education and guidance about TB and its treatment, she assists in finding social and economic resources needed to ensure a safe and healthy environment.

When asked if she thinks public health has changed over the last fifteen years, Pam laughs and says definitely "yes, there are more reportable diseases, more follow-up, and more accountability." What would she like to see change about public health? "More programs with a focus on prevention, more emphasis on wellness."

Pam and her husband of thirty-four years have raised six children. They do volunteer work at their church, visiting shutins, bringing elderly people to appointments and arranging for meals. An avid knitter, Pam makes shawls for people who are ill, using a special stitch: knit three, pearl three. This pattern is said to wrap the convalescent in healing energy.

The TB Division is pleased to recognize Pam Phillips for her devotion and commitment to her work and community.

### **New England TB Collaborative** continued from page six

neighboring states to ensure interruption of interstate TB transmission. By defining the exact TB strain infecting an individual, the programs can quantify the extent of transmission across states lines. The first discussion among New England TB programs of a common cluster involved 25 patients in four states.



some Medicare beneficiaries through Medicare Part D (unlike influenza and pneumococcal polysaccharide vaccine, which are covered under Medicare Part B). Coverage for shingles vaccine depends on the Part D plan, and details about coverage and various mechanisms for reimbursement are evolving. Beneficiaries can contact their plan for more information regarding coverage.

#### Resources

For additional information regarding shingles and shingles vaccine, consider the following resources:

- http://www.cdc.gov/nip/vaccine/zoster/default.htm
- http://www.zostavax.com/
- http://www.fda.gov/cber/products/ zosmer052506qa.htm
- http://www.immunize.org/vis/shingles.pdf (vaccine information statement for shingles vaccine)

#### References

ACIP Provisional Recommendations for the Use of Zoster Vaccine. Accessed January 22, 2007. Available at: http://www.cdc.gov/nip/recs/provisional\_recs/zoster-11-20-06.pdf

Adult Immunization 2006. Satellite Broadcast, December 7, 2006. Zoster Vaccine Segment slides. Accessed January 22, 2007. Available at: http://www.cdc.gov/nip/ed/AdultUpdate2006/adultim06\_zoster.ppt

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